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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,268	02/17/2004	David J. Gulbransen	03W140	2042
7590	03/04/2008		EXAMINER	
Raytheon Company EO/E04/N119 2000 East El Segundo Boulevard P.O. Box 902 El Segundo, CA 90245			AGGARWAL, YOGESH K	
			ART UNIT	PAPER NUMBER
			2622	
			MAIL DATE	DELIVERY MODE
			03/04/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/781,268

Applicant(s)

GULBRANSEN ET AL.

Examiner

Yogesh K. Aggarwal

Art Unit

2622

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 01 November 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1.  The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a)  The period for reply expires 3 months from the mailing date of the final rejection.  
 b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2.  The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3.  The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a)  They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b)  They raise the issue of new matter (see NOTE below);  
 (c)  They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d)  They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4.  The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 6.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7.  For purposes of appeal, the proposed amendment(s): a)  will not be entered, or b)  will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1,3-9 and 11-20.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8.  The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9.  The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10.  The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11.  The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See continuation sheet.  
 12.  Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
 13.  Other: \_\_\_\_\_.



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SUPERVISORY PATENT EXAMINER

**Examiner's response:**

1. Applicant argues with regards to claim 1 that since claim specifically recites that said first amplifier circuit is comprised of a CTIA and said second amplifier circuit is comprised of a SFD input circuit, therefore claim 1 recites specific ways for connecting the plurality of switches. The Examiner respectfully disagrees with the applicant. MPEP 2106 states that Limitations appearing in the specification but not recited in the claim should not be read into the claim. *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003) (claims must be interpreted "in view of the specification" without importing limitations from the specification into the claims unnecessarily). *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). In this case since more than one SFD and CTIA configurations are known in prior art, the claims need to recite how the different elements are connected to form SFD or CTIA circuits in the instant application. For example, Wiley (Re 34908) illustrates in figures 1 and 2 two different configurations of SFD circuits. Therefore office has not erred in arguing that the claims should recite the way capacitors and transistors are connected in order to overcome the prior art. Hence the rejection is maintained since the claims are written very broadly and merely specify that the circuit is formed of different transistors and capacitors and nothing as to how they are connected to each other. Since Ying discloses different variable gain circuits having transistors and capacitors, it reads on the claim having a plurality of capacitances, switches and transistors.

2. Applicant further argues with regards to claim 1 that the disclosure of Ying et al of a plurality of transistor/capacitor legs cannot be seen to read on the use of a configurable unit cell that can form a CTIA circuit and a SFD circuit. The Examiner disagrees. Examiner is not trying

to read a plurality of transistor/capacitor legs on the use of a configurable unit cell that can form a CTIA circuit and a SFD circuit. Applicant's admitted prior art is being used to teach this feature. Examiner notes that the heart of applicant's invention is as stated in Paragraph 18, Page 4 of applicant's specification is to have a higher gain or a lower gain amplifier configuration and to thereby cover a wide dynamic range by configuring electrical components to form higher gain amplifier (CTIA) below an illumination level and a lower gain amplifier (SFD) above the illumination level threshold.

Similar to this, Ying tries to increase the dynamic range by using different configurations of amplifier. Fig. 3 (Paragraph 24) of Ying clearly shows curve 309 after the capacitor is added thereby increasing dynamic range when the light increases above a certain threshold. Ying gives further examples as in figure 2b one implementation of a variable conversion gain 202 that comprises transistor C1 and M7 (Paragraphs 21-23). Ying et al. further discloses in figure 4 another possible configuration having two capacitors (C3 and C5) and two transistors (M9 and M 11). Finally Ying discusses that it is possible to have more than two legs in the variable capacitive load (Paragraph 26). Therefore Ying suggests multiple embodiments of variable capacitive loads and transistors in order to have the conversion gain of the pixel to be changed in response to several different thresholds of light intensity and widening the dynamic range. Therefore the motivation for both inventions is the same as they are both trying to solve the same problem. Therefore it is found that the references are reasonably pertinent to the problem with which applicant is involved, and would have commended themselves to anyone addressing such a problem. Applicant's argument concerning the substitution of CTIA and SFD for the Ying's amplifiers is without merit in that the test for obviousness is not whether the features of a

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secondary reference may be bodily incorporated into the structure of the primary reference. Nor is the test that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to the skilled artisan. In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In view of the foregoing, there is no impermissible hindsight or non-analogousness being used to demonstrate the obviousness. Therefore it is requested that applicant claims the features of SFD and CTIA in order to overcome the prior art.



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SUPERVISORY PATENT EXAMINER